

REMARKS

Claims 1-31 are in the case. Claims 1, 13 and 29-31 were amended to indicate the wireless channel used to transmit the multicast message as being dedicated to transmitting multicast messages.

Objection to the Abstract

At paragraph 1 of the Office Action, the abstract was objected to as being too long. Applicants have amended the abstract to overcome this objection. Applicants respectfully request that the Examiner accept the changes made to the abstract.

§ 103 Rejections

At paragraph 4 of the Office Action, claims 1-3, 10-12, 13, 14, 18-20 and 28-31 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 6,141,347 to Shaughnessy et al. (hereinafter “Shaughnessy”) in view of U.S. Patent 5,387,905 to Grube et al. (hereinafter “Grube”).

The present invention relates to a technique for transmitting multicast messages in a wireless communication network to a multicast group. According to an aspect of the invention, a base station having a plurality of wireless channels receives a multicast message addressed to the multicast group. The base station determines a plurality of multicast group members. The base station then sends the multicast message to the determined plurality of multicast group members via one of the wireless channels that is dedicated to transmitting multicast messages.

Shaughnessy describes a network where one or more subscriber units (wireless mobile units) operated by users are affiliated and serviced by a site (base station). Each subscriber unit is associated with a talk group identifier (ID). The site maintains a map that maps multicast addresses with the talk group IDs of subscriber units affiliated with the site. If a site receives

traffic based on a multicast address that maps to a talk group ID associated with affiliated subscriber units, the site includes the talk group ID in the traffic and transmits it over wireless channels to the subscriber units. Because the talk group ID is included in the transmitted traffic, subscriber units associated with the talk group ID process the traffic and subscriber units not associated with the talk group ID disregard the traffic.

Grube describes a wireless multi-site communications system that processes dispatch call requests sent from a source communication unit over a control channel to one or more destination communication units.

Representative claim 1 recites:

1. A method of multicasting messages in a wireless network comprising:
 - receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels;
 - determining a plurality of multicast group members; and
 - sending, ***over one of said wireless channels dedicated to transmitting multicast messages***, said multicast message, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members.

Applicants respectfully submit that neither Shaughnessy nor Grube taken either individually or in combination teach or suggest Applicants' claimed ***sending a multicast message over a wireless channel dedicated to transmitting multicast messages***.

Shaughnessy is silent on having a wireless channel that is dedicated to transmitting multicast traffic from a base station to multicast group members. In fact, Shaughnessy seems to teach away from using a separate wireless channel for multicast and seems to suggest using regular wireless channels to communicate multicast packets from based stations to subscriber units.

Likewise, Grube is also silent on having a *wireless channel that is dedicated to transmitting multicast traffic* from a base station to multicast group members. Grube uses a communication channel to transmit dispatch information to communication units. In addition, Grube indicates that the communication channel may be used by a communication unit to communicate with other units. See Col. 1, lines 36-39.

Applicants' claims, on the other hand, claim a *wireless channel dedicated to transmitting multicast traffic*. Grube does not teach having a multicast channel dedicated to transmitting multicast traffic. Rather, Grube seems to suggest that multicast traffic (i.e., dispatch information) and regular inter-unit communication are handled over the same channel.

For reasons set forth above, Applicants submit that Shaughnessy and Grube taken either individually or in combination are legally precluded from rendering Applicants' claims 1, 13 and 29-31 unpatentable under 35 U.S.C. § 103. Therefore Applicants believe claims 1, 13 and 29-31 are in condition for allowance.

At paragraph 5 of the Office Action, claims 5-9, 15-17, 21-24 and 26-27 were rejected under 35 U.S.C. § 103 as being unpatentable over Shaughnessy in view of Grube and in further view of U.S. Patent 6,308,079 to Pan et al. (hereinafter "Pan").

Applicants submit that Shaughnessy, Grube and Pan taken either individually or in combination do not teach or suggest Applicants' claimed *wireless channel dedicated to transmitting multicast messages*; thus Shaughnessy, Grube and Pan are legally precluded from rendering Applicants' claims 5-9, 15-17, 21-24 and 26-27 unpatentable under 35 U.S.C. § 103. Therefore Applicants believe these claims are in condition for allowance.

At paragraph 6 of the Office Action, claim 4 was rejected under 35 U.S.C. § 103 as being unpatentable over Shaughnessy in view of Grube and in further view of U.S. Patent 6,385,461 to Raith et al. (hereinafter "Raith").

Applicants submit that Shaughnessy, Grube and Raith taken either individually or in combination do not teach or suggest Applicants' claimed *wireless channel dedicated to transmitting multicast messages*; thus Shaughnessy, Grube and Raith are legally precluded from rendering Applicants' claim 4 unpatentable under 35 U.S.C. § 103. Therefore Applicants believe this claim is in condition for allowance.

At paragraph 7 of the Office Action, claim 24 was rejected under 35 U.S.C. § 103 as being unpatentable over Shaughnessy in view of Grube, Pan and Raith.

Applicants submit that Shaughnessy, Grube, Pan and Raith taken either individually or in combination do not teach or suggest Applicants' claimed *wireless channel dedicated to transmitting multicast messages*; thus Shaughnessy, Grube, Pan and Raith are legally precluded from rendering Applicants' claim 24 unpatentable under 35 U.S.C. § 103. Therefore Applicants believe this claim is in condition for allowance.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By Michael J. Badzinski
Michael J. Badzinski
Registration No. 51,425
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 1/5/05